

Claims 1-3 and 5-7 remain pending in the application, with Claims 1 and 3 being independent. The claims have not been amended herein.

Claims 1-3 and 5-7 were rejected under 35 U.S.C. § 102 as being anticipated by U.S. Patent No. 6,862,652 (Tsuji). This rejection is traversed.

As recited in independent Claim 1, the present invention relates to a method of controlling a printing apparatus which performs printing by using a printhead having a printing element and a storage unit, the printing apparatus including a first control unit which controls operation of the printing apparatus, and a second control unit which can operate independently of the first control unit. The method includes an instruction generation step, an acquisition step and a control step. The instruction generation step causes the first control unit to generate an instruction for acquiring specific information from information held by the storage unit of the printhead, the instruction includes information designating an identification name of the specific information but not including an address of the storage unit to be accessed. The acquisition step causes the second control unit to receive the instruction generated by the first control unit in the instruction generation step, generate an address for accessing the storage unit of the printhead based on the instruction, access the storage unit at the address, and acquire the specific information corresponding to the instruction. The control step causes the second control unit to drive and control the printhead on the basis of information which is generated on the basis of the specific information acquired in the acquisition step in order to drive the printhead. The acquisition step includes a generation step and a read step. The

generation step generates an access signal containing the address corresponding to the identification name designated by the instruction generated in the instruction generation step from the storage unit. The read step accesses the storage unit in accordance with the access signal generated in the generation step and reading out the specific information. The generation step generates the access signal by looking up a table which makes identification names designated by the instruction and storage addresses of the storage unit correspond to each other.

As recited in independent Claim 3, the present invention relates to a printing apparatus which performs printing by using a printhead having a printing element and a storage unit. The apparatus includes instruction generation means, acquisition means and control means. The instruction generation means generates an instruction for acquiring specific information from information held by the printhead, the instruction including information designating an identification name of the specific information but not including an address of the storage unit to be accessed. The acquisition means receives the instruction generated by the instruction generation means, generates an address based on the instruction, accesses the storage unit of the printhead based on the address, and acquires the specific information corresponding to the instruction from the storage unit. The control means drives and controls the printhead on the basis of information which is generated on the basis of the specific information acquired by said acquisition means in order to drive the printhead. The acquisition means includes generation means and read means. The generation means generates an access signal containing the address corresponding to the

identification name designated by the instruction generated by the instruction generation means from the storage unit. The read means accesses the storage unit in accordance with the access signal generated by the generation means and reads out the specific information. The generation means has a table which makes identification names designated by the instruction and storage addresses of the storage unit correspond to each other and generates the access signal by looking up the table.

Tsuji addresses a problem that a printing process or a response is delayed because an apparatus main body controlling section 2 accesses a non-volatile memory in a bit serial manner. Note column 1, lines 44-51. To solve this problem, Tsuji saves data stored in non-volatile memories 4, 5 into RAMs 17, 18, respectively. Note column 14, lines 13-25. Apparatus main body controlling section 2 transfers data and address information to memory access controlling section 3 to access RAMs 17, 18 instead of accessing the non-volatile memories, to thereby speed up the response.

With the present invention, however, the memory can be accessed using the identification name, so that specific data can be read out from the memory without considering data location in the memory (memory map). That is, with the present invention, even if the memory map differs depending on the type of printhead, proper data can always be read from the memory. Therefore, the present invention can access a memory without considering memory map, whereas Tsuji merely teaches accessing RAMs corresponding to non-volatile memories instead of directly accessing the non-volatile

memories. Tsuji does not disclose or suggest enabling to access memories using an identification name.

Therefore, Tsuji fails to disclose or suggest at least that an instruction for acquiring specific information from information held by (a storage unit of) a printhead includes information designating an identification name of the specific information but not including an address of the storage unit to be accessed, as is recited in independent Claims 1 and 3. Nor does Tsuji disclose or suggest generating an access signal containing an address corresponding to the identification name, with the access signal being generated by looking up a table which makes identification names and storage addresses of the storage unit correspond to each other, as is also recited in independent Claims 1 and 3.

The Office Action suggests that the claimed feature of the instruction including information designating an identification name of the specific information but not including an address of the storage unit to be accessed can correspond to “SEL” and “RXD” of Tsuji. However, as described in column 6, lines 55-60 of Tsuji, “SEL” and “RXD” are names of terminals. Specifically, RXD represents received signals from the apparatus main body controlling section 2, and SEL represents a signal indicating whether the length of command is fixed or variable. As shown in Figure 8(b) and described at column 9, lines 32-33 of Tsuji, the commands for accessing memories include memory address values. Although the commands shown in Figure 8(a) do not include a memory address, these commands do not relate to memory access. Accordingly, SEL and RXD in Tsuji cannot be construed as the claimed identification name.

Accordingly, Tsuji fails to disclose or suggest important features of the present invention recited in independent Claims 1 and 3.

Thus, independent Claims 1 and 3 are patentable over the citation of record. Reconsideration and withdrawal of the § 102 rejection are respectfully requested.

For the foregoing reasons, Applicant respectfully submits that the present invention is patentably defined by independent Claims 1 and 3. Dependent Claims 2, 5, 6, and 7 are also allowable, in their own right, for defining features of the present invention in addition to those recited in their respective independent claims. Individual consideration of the dependent claims is requested.

Applicant submits that the present application is in condition for allowance. Favorable reconsideration, withdrawal of the rejection set forth in the above-noted Office Action, and an early Notice of Allowance are requested.

Appln. No.: 10/629,919

Applicant's undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should continue to be directed to our below-listed address.

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